IOWA DEPARTMENT OF NATURAL RESOURCES ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:

SOUTH CENTRAL COOP 118 North Meyers Avenue Lacona, IA 50139 ADMINISTRATIVE CONSENT ORDER 2011-WW- 12

TO: South Central Coop

Attn: Neil Moon

118 North Meyers Avenue

Lacona, IA 50139

I. SUMMARY

The Iowa Department of Natural Resources (Department) and South Central Coop (South Central) hereby agree to the following Administrative Consent Order (Order). South Central agrees to pay fish restitution and investigation costs of \$16,470.05 to the Department and develop spill prevention and emergency response plans. See Sections IV and V for more details

Any questions regarding this Order should be directed to:

Relating to technical requirements:

Ted Petersen
Iowa Department of Natural Resources
401 SW 7th Street, Suite I
Des Moines, Iowa 50319
Ph: 515/725-0274

Payment of penalty to:

Director of the Iowa DNR Wallace State Office Building 502 East Ninth Street Des Moines, Iowa 503219-0034

Relating to legal requirements:

Aaron Brees, Attorney
Iowa Department of Natural Resources
Des Moines, Iowa 50319-0034
Ph: 515/281-5965
aaron brees@dnr iowa gov

II. JURISDICTION

This Order is issued pursuant to Iowa Code section 455B 175(1), which authorizes the Director to issue any order necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division III, Part I (water quality) and the rules promulgated or permits issued pursuant thereto; Iowa Code section 481A 151, which authorizes the collection of restitution costs for harm to wildlife; and Iowa Code section 455B 109 and administrative rules in 567 Iowa Administrative Code (I.A.C.) chapter 10, which authorize the Director to assess administrative penalties up to \$10,000

III. STATEMENT OF FACTS

The Department and South Central hereby agree to the following statement of facts:

- 1. South Central is the owner and operator of an anhydrous ammonia tank storage and filling facility located in Lacona, Warren County, Iowa The facility contains five above ground storage tanks, including piping between tanks used for transferring and filling purposes.
- 2 At 10:30 AM on August 19, 2010, an anhydrous ammonia release at the South Central facility was reported to the Department. Local fire departments, a Des Moines HazMat team, and the county emergency management coordinator were involved in evacuating nearby residents and stopping the release.
- 3 At 1:00 PM on August 19, 2010, Ted Petersen of Department Field Office 5 conducted an onsite evaluation to assess the environmental impacts of the release Information provided by onsite personnel indicated that the responding fire departments sprayed water on the anhydrous ammonia plume in order to gain access to the tank area to stop the release and minimize the impact on local residents
- 4. Mr. Petersen noted that water from the tank area was flowing to a culvert to the southeast. This water flowed south through the culvert to a drainage tile inlet. Water flowed through this tile to where the tile outlets into Mill Branch Creek. Mill Branch Creek flows into Cotton Creek which then flows into White Breast Creek.
- 5 Mr Petersen noted dead fish, frogs, and other aquatic organisms in Mill Branch Creek South Central staff were informed of the situation and promptly constructed an earthen dam near the tanks to prevent additional runoff Liquid that remained around the tanks was recovered by South Central staff for appropriate disposal via land application
- 6 Mr Petersen noted a strong ammonia odor near the tanks, the tile inlet, and from the tile outlet. While onsite, water samples from near the tile inlet, the outlet, and from Mill Branch Creek, Cotton Creek, and White Breast Creek downstream from the tile outlet, were tested for ammonia-nitrogen using a Hach field test kit. Results indicated elevated levels of ammonia-nitrogen.

- 7 Further assessment by Mr Petersen revealed dead frogs, a dead snake, and dead fish in Mill Branch Creek between the tile outlet and Cotton Creek, dead fish in Cotton Creek, and dead and struggling fish in White Breast Creek
- 8 To prevent further contamination, South Central constructed a dam across Mill Branch Creek above its confluence with Cotton Creek. Approximately 30,000 gallons of water were then removed from Mill Branch Creek and land applied in nearby fields.
- 9. In addition to field testing the water with a Hach test kit, Mr. Petersen collected multiple water samples from the relevant water bodies which were then submitted to the University of Iowa Hygienic Laboratory (UHL) in Ankeny for ammonia-nitrogen analysis. These included samples from Cotton Creek upstream from its confluence with Mill Branch Creek and from Mill Branch Creek upstream from the tile outflow, taken to ensure that there were no other sources for the ammonia-nitrogen levels found. The UHL results are presented in Table 1 below:

TABLE 1. UHL Analysis Results and Sampling Locations

Location	Map Id. Number	Ammonia-N	Time Sampled (0-2400 hrs)	Dead Fish Observed
Cotton Creek Upstream	1	0.05 mg/L	1700	No
Tile Inlet Near Coop	2	13,000 mg/L	1445	NA
Tile Outlet to Mill Branch	3	17,000 mg/L	1433	NA
Mill Branch Downstream	4	1300 mg/L	1435	Yes
Mill Branch Upstream	5	0.17 mg/L	1430	No
White Breast Creek/Utah St.	6	29 mg/L	1530	Yes
White Breast Creek/Hwy G76	7	22 mg/L	1540	Yes

- 10 On August 19-20, 2010, Department Fisheries Bureau staff investigated the impacted streams and conducted a fish kill assessment. Their observations included dead crayfish, earthworms, and frogs, and dying vegetation. Dead fish were counted in all three streams, totaling 2,784 individuals. Approximately 10.5 miles of the streams were affected by the ammonia contamination at the time of these observations.
- 11. On August 21, 2010, Field Office 5 staff Dave Perry retested ammonia levels in Mill Branch Creek and found a level of 1.6 ppm Mr. Perry required a trench be dug between the tank area and the tile inlet to intercept additional contaminants.
- 12 On September 20, 2010, samples from the trench found ammonia levels of 7.0 and 7.9 ppm. Testing on March 28, 2011 showed levels had declined to 0.06 and 0.11 ppm.
- 13 On September 23, 2010, the Department sent South Central a Notice of Violation letter for the prohibited discharge of anhydrous ammonia to waters of the state. On April 22, 2011, the Department sent a letter to South Central reporting the results of follow-up site visits and requiring a site assessment plan.

14 South Central has complied with or is currently complying with all Department requirements related to cleanup and site assessment.

IV. CONCLUSIONS OF LAW

The parties hereby agree that the following conclusions of law are applicable to this matter:

- 1 Iowa Code section 455B 186(1) and 567 I.A.C. 62.1(1) prohibit the discharge of "a pollutant" into "a water of the state" unless it is released pursuant to a valid permit issued by the director. National Pollution Discharge Elimination System (NPDES) permits are issued to point sources pursuant to Iowa Code section 455B 197 and 567 I.A.C. chapter 64. The Environmental Protection Commission (EPC) has adopted federal effluent limitation standards by reference, and imposed different standards when necessary to comply with applicable water quality standards. See 567 I.A.C. 62.8(2).
- 2 A "pollutant" is defined in Iowa Code section 455B 171(18) as "sewage, industrial waste, or other waste" Ammonia contaminated water, such as that released into the environment in the present case, is a pollutant under this definition
- 3 Mill Branch Creek, Cotton Creek, and White Breast Creek are "waters of the state" pursuant to Iowa Code section 455B 171(37) which defines the term to include "any stream, watercourse, waterway, drainage system, and any other body or accumulation of water natural or artificial, public or private, which are contained within the state..."
- 4. As South Central did not have a NPDES permit authorizing the discharge of anhydrous ammonia to these waters, it has discharged a pollutant into a water of the state in violation of the above provisions.
- 5. Iowa Code section 455B 173 states that the EPC shall develop water quality standards which shall, at a minimum, maintain the existing quality of the water of the state. The EPC has done so in 567 LA.C. chapter 61.
- 6. 567 I A C. 61.3(2) states that all surface waters of the State "shall be free from substances attributable to wastewater discharges or agricultural practices, which are acutely toxic to human, animal, or plant life." South Central's ammonia discharge which caused the deaths of fish and other organisms is a violation of this provision.
- 7. Iowa Code section 481A 151 states that any person who is liable for polluting water of the state in violation of state law shall be required to pay restitution for any resulting injury to wild animals. This section authorizes the Natural Resource Commission (NRC) to adopt rules applicable to the method of calculating restitution assessments and authorizes the Department to recover these assessments through Iowa Code chapter 17A contested case procedures. The NRC has adopted such rules in 571 I A C 113.

8. Based on the authority provided by and methods specified in 571 I.A.C. 113 and 567 I.A.C. 133.6, the Department is authorized to collect, and South Central is liable for the following:

Fish restitution \$12,891.81 Fisheries investigation costs \$3,306.24 Field Services investigation costs \$272.00

V. ORDER

THEREFORE, the Department hereby orders and South Central agrees to the following:

- South Central shall pay to the order of the Iowa Department of Natural Resources a total of \$16,470.05 for fish restitution and investigation costs within 30 days of receipt of this Order.
- 2 South Central shall conduct a risk assessment of the existing facility and response procedures to assure that future releases with the potential to cause environmental harm are prevented or contained. Identified risks shall be addressed in a written assessment report, a copy of which shall be submitted to the department within 90 days of receipt of this Order. This assessment report shall identify improvements necessary to prevent or contain released material and include a schedule for implementing those improvements.
- 3. South Central shall develop an emergency response plan for dealing with releases from the facility. The emergency response plan shall be completed, and a written copy submitted to the Department, within 90 days of receipt of this Order.
- 4. South Central shall continue its existing site assessment efforts at the facility and undertake such additional remediation, assessment, monitoring, and/or reporting activities as may be required by statute or administrative rule.

VI. PENALTY

1. Iowa Code section 455B 191 authorizes the assessment of civil penalties in Iowa District Court of up to \$5,000 per day of violation for the violations involved in this matter. More serious criminal sanctions are also available pursuant to that provision. Additionally, Iowa Code section 455B 109 authorizes the EPC to establish by rule a schedule of civil penalties up to \$10,000 which may be assessed administratively. The EPC has adopted this schedule with procedures and criteria for assessment of penalties in 567 I A C. chapter 10.

ECONOMIC BENEFIT: South Central did not benefit economically from the incident. Therefore, no penalty is assessed for this factor.

GRAVITY: An illegal discharge resulting in a fish kill is a serious violation. However, given that the discharge was the result of efforts to protect human health from an immediate threat, and given that South Central was cooperative and took prompt action to minimize the impact of the release, no penalty is assed for this factor.

CULPABILITY: This incident was an unexpected accident. South Central did not intentionally violate the law and has cooperated with the Department in all facets of the investigation, cleanup, and assessment processes. Therefore, no penalty is assessed for this factor.

Based on the above factors, no penalty is assessed.

VII. WAIVER OF APPEAL RIGHTS

Iowa Code sections 455B 175, 481A 151, and 561 I.A.C. 7.4(1), as adopted by reference by 567 I.A.C. chapter 7 and 571 I.A.C. chapter 7, authorize a written notice of appeal to the EPC and NRC, respectively. This Order is entered into knowingly by and with the consent of South Central. By signing this Order all rights to appeal this Order are waived.

VIII. NONCOMPLIANCE

Compliance with Section V of this Order constitutes full satisfaction of all requirements pertaining to the violations described in this Order Failure to comply with this Order may result in the imposition of administrative penalties pursuant to an administrative order or referral to the Attorney General to obtain injunctive relief and civil penalties pursuant to Iowa Code section 455B 175

Dated this 22 day of Jugest, 2011

ROGER L. LANDE, DIRECTOR

IOWA DEPARTMENT OF NATURAL RESOURCES

Dated this <u>16th</u> day of <u>llegust</u>, 2011

South Central Coop; Ted Petersen; Aaron Brees; C(1), C(6)(a)